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ARIZONA STATE UNIVERSITY ■ COLLEGE OF BUSINESS
BUREAU OF BUSINESS AND ECONOMIC RESEARCH

Standard of Living Near Average in Metro Phoenix

Although "standard of living" is a common term, its definition usually is not clearly understood. Sometimes used interchangeably with "cost of living," at other times the term is considered synonymous with "wages" or "income." Technically, the standard of living is a comparison of the cost of living to wage/income levels, but few, if any, studies provide such data. This article presents one measure of the standard of living, which indicates that living standards in the Phoenix area are near the regional and national averages but less than the average of large metropolitan areas. For other Arizona cities, however, the standard of living is far below all comparative averages.

Because standard-of-living information is not as accessible as cost-of-living data, consumers, businesses and local governments usually concentrate on intercity cost-of-living comparisons. Individuals often use the information to make migration decisions: Should they move from

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Valley Inflation Decelerates to 0.3 Percent

Inflation in the Phoenix metropolitan area slowed considerably during the third quarter to 0.3 percent. The advance was the smallest since the first quarter, 1983, and much less than the 1.5 to 1.9 percent gains of most recent quarters (see Table 1). From the third quarter, 1984, prices of goods and services rose 4.5 percent to an index value of 191.4 in the third quarter, 1985 (1977 = 100).

COMPONENT INDEXES

Widespread price declines contributed to the decelerating inflation rate. Two of the three largest categories, food/beverages and transportation, experienced their greatest decreases in years. Higher housing costs and, to a lesser extent, higher medical care and entertainment prices, offset these declines.

Food and Beverages

A 0.7 percent decrease in the third quarter was the largest since the first quarter, 1976. Prices dropped for food purchased both in grocery stores and in restaurants. Lower prices were common for grocery items, including cereal and bakery products; meats, poultry, fish and eggs; and fruits and vegetables (see Table 2). In the latter two categories, prices were no higher during the

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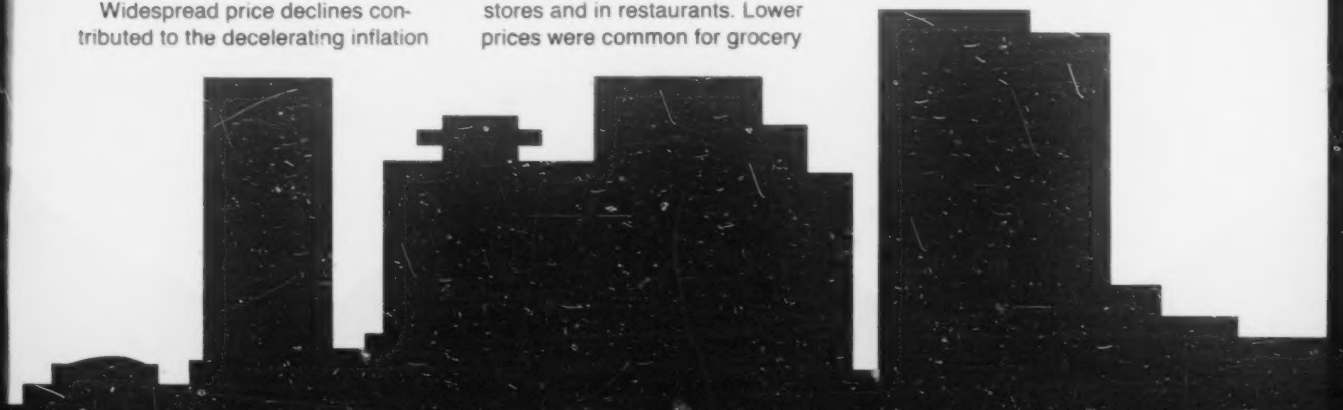

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one city to another to accept a new job? Businesses use cost-of-living data both in establishing wage/salary levels that reflect differences in living costs nationwide and in deciding whether to relocate or open a branch in another area. Finally, local governments use their area's cost of living as an enticement to attract new businesses and individuals.

While the cost of living is sometimes an adequate measure — for example, retirees who do not earn wages do not need to be concerned with the standard of living — generally, the standard of living provides more useful information. For example, an individual who wishes to move to another region of the country may exclude city 'x' from the list of potential new homes because it is known to be an expensive city. However, if wage levels in city 'x' are also high, its living standard may be higher than that of city 'y,' which has a low cost of living but a low wage structure as well.

This article analyzes living standards by comparing income levels to cost-of-living data. Differences in the standard of living are examined by geographic area as well as by population size of a town or urbanized area. First, however, both the cost of living and income levels must be reviewed.

THE COST OF LIVING

The American Chamber of Commerce Researchers Association's (ACCRA) quarterly report, *Inter-City Cost of Living Indicators*, presents cost-of-living information for U.S. towns and cities in which the chamber of commerce volunteered to participate. In any given quarter, the ACCRA study includes at least 225 listings, including both small towns and large cities such as Phoenix, Tucson and Yuma. It is probably the most comprehensive source of cost-of-living data that is readily available to the general public.

The ACCRA Cost of Living Index measures the relative living cost of each participating city, as compared with the national average of those cities. Strong regional variations are evident in the data. Table 1 provides a summary of living costs for nine areas, based on the Census Bureau's regional classification scheme shown in Figure I. These indices show the New England region having the highest overall cost of living and the East South-Central region the lowest overall costs, with a 15 percent difference between the two regions. The median cost of living in the Mountain states, which include Arizona, is exactly the national average.

The ACCRA data also demonstrate that, other factors being equal, the larger the urbanized area, the higher the cost of living (Table1). Living costs are significantly lower than the national average in smaller towns (less than 75,000), while they are higher than the national average in large urban areas (1 million or more).

With a population of approximately 1.7 million during 1984, the Phoenix metropolitan area is one of the largest in the nation. Thus, the area would be expected to have a cost of living higher than the national average. While this is the case — Phoenix has a cost-of-living index of approximately 105 — it is less than the average for large urban areas. The same is true in Tucson: With a

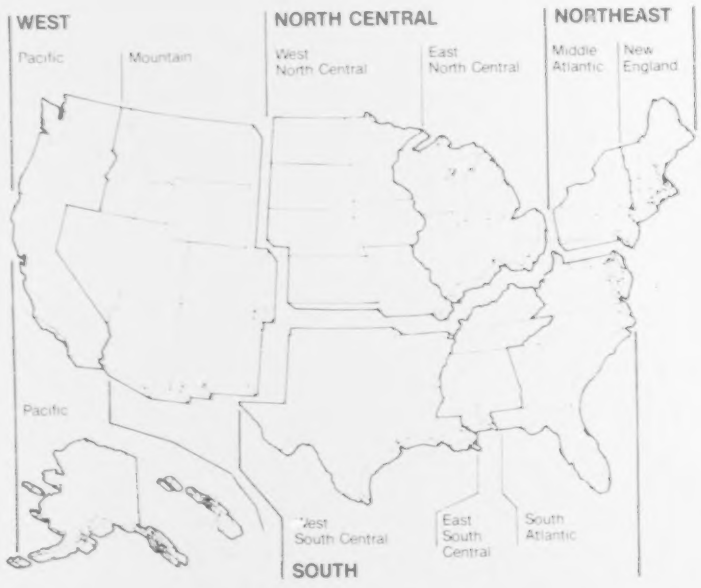
TABLE 1
MEDIAN LIVING COST INDEXES
By Geographic Area, Popuiation of Urbanized Area, and Income
(National Average = 100)

Area	Index
New England	108*
Middle Atlantic	101
South Atlantic	98
East South-Central	94*
West South-Central	101
East North-Central	98
West North-Central	96*
Mountain	100
Pacific	104*
Population	
Less than 25,000	97*
25,000 - 74,999	96*
75,000 - 124,999	99
125,000 - 199,999	99
200,000 - 399,999	101
400,000 - 999,999	101
1 million or more	107*
Income	
Less than $21,500	96*
$21,500 - $23,999	98
$24,000 - $26,499	99
$26,500 or more	103*

*Statistically significant difference from the national average.

Source: Bureau of Business and Economic Research, College of Business, Arizona State University, based on 1980 Census population figures, 1984 *Sales and Marketing Management* household disposable income figures, and 1984 data of the American Chamber of Commerce Researchers Association (ACCRA).

FIGURE 1
REGIONS AND CENSUS DIVISIONS OF THE UNITED STATES



Source: U.S. Department of Commerce, Bureau of the Census.

metropolitan population of approximately 600,000, the area's reported cost-of-living index of 99 is lower than the average of urban areas of equivalent size. In contrast, the Yuma cost-of-living index of 103 is greater than would be expected for a city of 50,000.

INCOME LEVELS

Analysis of the ACCRA data base indicates that a strong connection exists between area income levels and living costs. This correlation is slightly higher than that of cost of living to population or that of cost of living to geographic region. Table 1 clearly shows the relationship of income to cost of living, as lower income areas (less than $21,500) have the lowest living costs, and higher income areas (more than $26,500) have the highest living costs (both statistically significant). The difference in costs between these two income classes is 7 percent.

As with the cost of living, income levels vary considerably nationwide. Lowest in the South, they differ significantly from the national average in the South Atlantic and East South-Central regions, as shown in Table 2. The New England and East North-Central regions report significantly higher incomes. Incomes also vary by city size, with small towns significantly below the national norm and large metropolitan areas significantly higher.

Income levels in Arizona are far below average, when typical levels for the Mountain region and various city sizes are considered. The median household effective buying income in the Phoenix area during 1984 was estimated at $25,153. While slightly higher than the median of both the Mountain states and the entire nation, this level is much below the $28,610 median of large urban areas. Tucson's median income of $21,012 and Yuma's median income of $19,894 are both well below the medians of the nation, the region, and the respective population classes.

STANDARD OF LIVING

A measure of the standard of living can be derived by adjusting income levels for the cost of living: the simple division of an area's income by its cost-of-living index. The adjusted income figures should vary little by city size or by region if income levels adequately compensate for differences in the cost of living.

Although the adjusted income measure reduces area income differentials by population size, income levels of small towns continue to be significantly lower and those of large urbanized areas remain significantly higher. This adjustment only slightly reduces overall variation in income across the regions of the United States. The standard of living remains lowest in the South, with significant differences in the East South-Central and South Atlantic regions. After adjusting for cost-of-living differentials, the New England region no longer enjoys significantly higher income levels; rather, the East North-Central (Great Lakes) and West North-Central (Great Plains) regions have the highest living standards.

Living costs, income levels, and standards of living vary from one metropolitan area to another within each region and each population size category. Thus, care must be taken in generalizing these findings to localized areas. New York City and various small towns in the South experience the lowest living standards; the highest standards of living are found in large urban areas in the Midwest and West, including Minneapolis-St. Paul (see Figure II).

Primarily because of relatively low income levels in Arizona, the state's standard of living is also relatively low. In the Phoenix area, the 1984 adjusted income of $23,842 was near both the regional and national medians but was approximately 10 percent less than expected for a large metropolitan area. For Tucson and Yuma, the standards of living were lower — from 10 to 20 percent less than averages for the nation, region, or cities of comparable size.

CONCLUSIONS

Living costs vary widely from city to city across the United States. Certain regions tend to be more expensive than others, and large cities tend to be more expensive than small cities. For those who are not part of the work force, such as retirees, these living cost differences are sufficient to contribute to migration patterns. For those who are employed, and for employers, living cost variations need to be considered in conjunction with wage/income levels. A worker, for example, is not likely to find a low living-cost area as attractive if wage/income levels are also low. Similarly, an employer may be attracted to a low wage/income area but may have difficulty recruiting workers if the cost of living is high.

Thus, in most applications, the standard of living is more important than either living costs or wage/income levels. If a city has a low cost of living

TABLE 2
MEDIAN HOUSEHOLD INCOME WITH AND WITHOUT COST-OF-LIVING ADJUSTMENT

Geographic Area	Income	Adjusted Income
New England	$29,049*	$28,206
Middle Atlantic	26,237	25,965
South Atlantic	23,191*	23,384*
East South-Central	21,297*	21,947*
West South-Central	24,465	23,898
East North-Central	25,991*	26,563*
West North-Central	26,066	26,734*
Mountain	24,173	23,883
Pacific	25,442	24,177
Population of Urbanized Area		
Less than 25,000	$23,133*	$23,284*
25,000 – 74,999	23,172*	23,918
75,000 – 124,999	24,012	24,587
125,000 – 199,999	25,321	25,472
200,000 – 399,999	25,774	25,606
400,000 – 999,999	25,442	24,915
1 million or more	28,610*	26,666*
NATIONAL AVERAGE	$24,561	$24,574

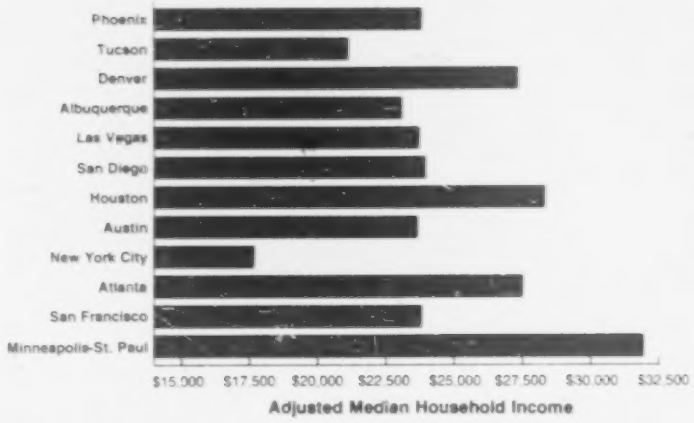
*Statistically significant difference from the national average.

Source: Bureau of Business and Economic Research, College of Business, Arizona State University, based on 1984 *Sales and Marketing Management* household disposable income figures and 1984 ACCRA cost-of-living figures.

and relatively high income levels, the local government has a much better chance of attracting both new employers and new workers. Various cities throughout the United States, in all regions and of all sizes, enjoy this favorable relationship between income levels and living costs. However, large metropolitan areas tend to have the highest living standards. The geographic pattern to this variation is significant, with living standards in the Southeast tending to be lowest and those in the Great Lakes and Great Plains regions the highest.

Research has yet to identify the causes of these variations in incomes, living costs and living standards. The economic laws of supply and demand appear to play a role. The region of the country with the highest living standards — the Midwest — is also an area that has suffered from declining population. Thus, high income levels in comparison to the cost of living are apparently the result of labor market adjustments to retain and attract people to the area. In contrast, Arizona is such an attractive area that incomes can lag behind living costs without adversely impacting the state's growth.

FIGURE II
STANDARD OF LIVING IN SELECTED CITIES



Source: Bureau of Business and Economic Research, College of Business, Arizona State University.

— **Timothy D. Hogan**

— **Tom R. Rex**
Research Manager

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third quarter than during the third quarter, 1984.

Prices of many food items are seasonal; typically, food price inflation slows throughout the year, culminating in a small fourth quarter gain. Lower prices during the third quarter suggest that the seasonal slowdown occurred earlier than usual in 1985; price increases are likely to resume during the fourth quarter.

Housing

Relatively large gains in housing costs, the largest portion of the CPI, prevented the overall index from declining in the third quarter. Renters' costs rose 1.5 percent; and homeowners' costs increased 2.0 percent, the most since the rental-equivalency method of measuring homeownership costs was implemented during 1983.

The greatest boost to this category resulted from an 11.8 percent advance in electricity costs, primarily due to a fuel cost adjustment. However, this gain was partially offset by another decline in utility gas rates; the price of piped gas was 8.1 percent lower in the third quarter than in the third quarter, 1984.

Transportation

The transportation index dropped 2.2 percent, its greatest quarterly decline in the history of the Phoenix CPI. Gasoline prices fell 9.1 percent, the most since the first quarter, 1983, but this decrease came on the heels of an 11.5 percent jump during the second quarter. The indexes of several other transportation categories declined during the third quarter: used cars, vehicle parts and equipment, vehicle maintenance and repair, and vehicle finance charges. In each of these categories, the index was lower than it was in the third quarter, 1984. In contrast, vehicle insurance premiums rose 3.7 percent during the third quarter and were 28.7 percent higher than the level of one year earlier.

Medical Care

While medical care costs continued to advance at a relatively rapid rate, the composition of the increases again changed. Hospital costs jumped 6.3 percent in the third quarter, the first gain of any magnitude since the fourth quarter, 1983. Health insurance premiums, however, experienced their second consecutive relatively small increase, rising less than in any two-successive-quarter period since early 1982.

CPI Description Available

A description of the Consumer Price Index is available on request from the Bureau of Business and Economic Research. It answers common questions concerning the CPI; for example:

- What is the difference between the CPI for all urban consumers (CPI-U) and the CPI for urban wage earners and clerical workers (CPI-W)?
- What is the relationship between the CPI and the inflation rate and how is this rate calculated?
- Is the CPI a cost-of-living index?
- How is the CPI applied in contractual agreements?

A copy of the CPI description can be obtained by calling (602) 965-3961.

Other Categories

Apparel costs contributed to the third quarter's slow inflation by falling 2.5 percent, this category's greatest decline in the history of the Phoenix CPI. A small 0.3 percent increase in prices of other goods and services, the smallest since the first quarter, 1981, also helped hold down inflation. Entertainment costs, however, rose 2.4 percent.

COMPARISON AREAS

For the first time in seven quarters, the quarterly inflation rate in the Phoenix area was less than the national average (see Table 3). However, the area's price increases for the year ending in the third quarter remained higher than the national average in all major categories except other goods and services.

The third quarter's slower inflation allowed the Phoenix area to escape the dubious distinction of having the highest inflation rate in the nation. The annual increase in San Diego was much higher than in Phoenix, primarily due to a wide disparity in housing inflation. The inflation rate in other metropolitan areas, including Los Angeles and Atlanta, was also greater than that in Phoenix.

OUTLOOK

Short-term inflationary surges in specific items, which had contributed to the Valley's relatively rapid price inflation of recent quarters, were notably absent during the third quarter, with the exception of the electricity rate hike. Instead, deflationary conditions prevailed throughout the food, transportation and apparel categories.

While the small gain of the third quarter likely is only an aberration, it may signal that the Valley's quarterly inflation rate will not return to the 1.5 percent to 1.9 percent range that was common during the past two years. Due to seasonal conditions, such as switching to the winter electricity rate schedule, the fourth quarter inflation rate probably will remain moderate; however, much of the downward influence of food prices may have been felt during the third quarter. Additional evidence of moderation in the Valley's inflation rate will be necessary to justify lowering the 1986 forecast below 6 percent.

— Tom R. Rex
Research Manager

TABLE 1
PERCENT CHANGES IN
METROPOLITAN PHOENIX CONSUMER PRICE INDEX

		Percent Change from Preceding Quarter						
Expenditure Category	*Relative Importance*	*1st 1984*	*2nd 1984*	*3rd 1984*	*4th 1984*	*1st 1985*	*2nd 1985*	*3rd 1985*
ALL ITEMS	100.0	1.9	1.5	1.7	0.7	1.8	1.6	0.3
Food and Beverages	19.0	1.8	0.7	1.0	0.2	2.6	1.1	-0.7
Housing	38.9	0.6	2.0	2.3	-0.1	1.2	1.4	2.2
Apparel and Upkeep	4.8	2.5	-1.3	-0.1	0.4	2.2	3.1	-2.5
Transportation	21.7	1.6	2.3	1.2	2.2	1.7	2.8	-2.2
Medical Care	6.6	11.4	1.1	3.0	2.7	3.4	1.3	2.3
Entertainment	4.6	1.1	2.3	2.6	0.3	4.6	0.2	2.4
Other Goods and Services	4.3	0.8	1.1	2.1	1.2	1.4	1.7	0.3

Source: Bureau of Business and Economic Research, College of Business, Arizona State University, in cosponsorship with Valley National Bank.

TABLE 2
METROPOLITAN PHOENIX CONSUMER PRICE INDEX
Third Quarter, 1985
(1977 = 100)

Expenditure Category	*Last Qtr. Index*	*This Qtr. Index*	*Percent Change*	*Year-Ago Change*
ALL ITEMS	190.8	191.4	0.3	4.5
Food and Beverages	172.2	171.0	-0.7	3.2
Food	173.0	171.7	-0.8	3.3
Food at Home	170.6	168.7	-1.1	2.9
Cereal and Bakery Products	186.5	185.6	-0.5	7.6
Meats, Poultry, Fish, and Eggs	157.9	156.4	-1.0	-0.0
Dairy Products	160.1	160.9	0.5	4.4
Fruits and Vegetables	189.1	177.3	-6.3	-0.2
Other Food at Home	159.5	160.8	0.8	4.5
Food Away from Home	174.9	174.7	-0.1	4.2
Housing	197.7	202.0	2.2	4.6
Shelter	210.8	215.1	2.1	5.6
Renters' Costs**	114.4	116.1	1.5	6.4
Homeowners' Costs**	106.0	108.1	2.0	4.7
Fuel and Other Utilities	175.9	181.5	3.2	2.2
Gas (piped) & Electricity	195.7	206.2	5.4	2.5
Household Furnishings & Operations	150.7	153.0	1.5	3.6
Apparel and Upkeep	147.9	144.2	-2.5	3.1
Transportation	191.9	187.7	-2.2	4.5
Private Transportation	189.4	184.4	-2.7	4.9
New and Used Cars	194.1	193.9	-0.1	1.8
Motor Fuels	215.7	196.0	-9.1	4.4
Public Transportation	232.6	241.2	3.7	-0.2
Medical Care	251.4	257.2	2.3	10.1
Entertainment	180.4	184.7	2.4	7.6
Other Goods and Services	171.4	171.9	0.3	4.7

An ** indicates that the base period is second quarter, 1983.

Source: Bureau of Business and Economic Research, College of Business, Arizona State University, in cosponsorship with Valley National Bank.

TABLE 3
METROPOLITAN PHOENIX CONSUMER PRICE INDEX
UNITED STATES AND COMPARATIVE CITIES
Third Quarter, 1985

	Percent Change from Last Quarter		Percent Change from One Year Ago			
Expenditure Category	*Phoenix*	*United States*	*Phoenix*	*United States*	*Denver*	*San Diego*
ALL ITEMS	0.3	0.7	4.5	3.3	3.0	6.1
Food and Beverages	-0.7	0.3	3.2	1.6	2.0	1.9
Housing	2.2	1.3	4.6	3.9	2.2	9.5
Apparel and Upkeep	-2.5	0.0	3.1	2.6	5.7	4.5
Transportation	-2.2	-0.2	4.5	2.5	3.2	4.7
Medical Care	2.3	1.8	10.1	6.5	7.3	2.9
Entertainment	2.4	0.8	7.6	3.6	1.5	5.8
Other Goods and Services	0.3	1.1	4.7	6.1	5.0	6.9

Source: Metropolitan Phoenix data compiled by the Bureau of Business and Economic Research, College of Business, Arizona State University, in cosponsorship with Valley National Bank; other data are from the U.S. Department of Labor, Bureau of Labor Statistics.

Purchasing Indicators Grow Moderately in September

Arizona's economic performance continued to improve in September, but at a moderate rate. Both new orders received from customers and production posted good gains. Yet vendor backlogs remain low, and inventories of purchased materials were reduced. Upward price pressures were noticeably absent.

The economy continued to move slowly upward during the first three quarters. While no vigorous growth was recorded, the rate of increase in the last month of the third quarter was better than at the beginning of the summer. Prices are well under control. The same measured growth should continue through the final quarter, and the 1985 economic year should close at a somewhat higher level than now is evident.

Table 1 presents the results of the September survey of Arizona purchasing managers.

PRICES

Prices paid for major purchased items advanced again in September, but at the same moderate rate as in August. With the exception of last May's increase, the September gain was the lowest of any month so far in 1985. Inflation has been held in check this year, a major factor in permitting the economic expansion to continue over almost three years. It is not likely that upward price pressures will be a problem during the balance of 1985.

DELIVERY TIME

Delivery time on shipments from vendors was unchanged. With the exception of last March, September was the first month since October 1982 in which delivery time did not stretch. The fact that order times have shown small increases during each month of 1985 is a sign that Arizona's economic growth this year has been only moderate.

INVENTORIES

Inventory levels of purchased materials dropped slightly in September, following the previous month's increase. May, June, and July also showed slight inventory reductions. The lack of inventory growth shows that Arizona firms continue to be cautious in their future plans. On the positive side, there is no inventory overhang, which might cause a major inventory-induced downturn.

NEW ORDERS

New orders received by Arizona firms went up in September, but at a somewhat smaller increase rate than in the preceding month. While new order gains, overall, have been moderate so far this year, the order books of Arizona firms have grown progressively larger as the year has unfolded. As long as this trend is maintained, the economy will continue in a growth mode.

PRODUCTION

Production rose again in September, at the same rate as in the previous month. While the production jump was lower than those of the first few months of 1985, it indicates that Arizona firms still are expanding.

EMPLOYMENT

Employment registered only a slight increase, the smallest this year. The September advance was much less than that of August. While employment levels have shown only moderate gains this year, each month has been stronger than the previous one, and no net employment declines have been experienced.

PURCHASES

Purchases of materials and supplies by Arizona firms increased at approximately the same rate as in August. These greater purchase quantities are needed to meet the requirements of the higher new order rate and production needs.

—Harold Fearon

Dr. Fearon is chairman of the Department of Purchasing, Transportation, Operations in the ASU College of Business and is the National Association of Purchasing Management Professor.

Arizona Purchasing Survey

Now in its 23rd year of monthly reporting, Dr. Harold Fearon's survey of Arizona business conditions utilizes data from a questionnaire sent to members of the purchasing management associations of Arizona and southern Arizona. It asks them to indicate the direction of activity — higher, unchanged, or lower — of seven key measures of economic activity in the month just ended. These purchasing managers deal daily with supply, demand, and price factors in the marketplace; their aggregate readings have accurately charted the state's economic course for two decades, providing timely data on turning points.

TABLE 1
SEPTEMBER PURCHASING SURVEY

	Percent of Purchasing Managers Indicating Each Response (September compared to August)		
Key Indicators	*Higher*	*Same*	*Lower*
Prices paid for major commodities	19	68	13
Delivery time from vendors	16	68	16
Purchased materials inventory level	29	40	31
New orders received	38	42	20
Production	34	48	18
Employment	22	59	19
Purchases	40	39	21

Source: Purchasing Management Association of Arizona and the Purchasing Management Association of Southern Arizona.

Arizona Leading Index Posts Third Straight Gain

The Arizona Index of Leading Economic Indicators rose 0.7 percent in August, the third consecutive large monthly gain. Following increases of 0.6 percent in July and 0.7 percent in June, the index reached a new peak of 106.5 in August (1977 = 100).

Improvement was widespread, not limited to the interest-rate-sensitive sectors that had provided much of the stimulus for the June and July surges (see Table 1). Improvement was measured in 80 percent of the components — the highest diffusion index in two years.

Index components derived from a survey of Arizona purchasing managers during August posted their greatest monthly gain in 10 years (seasonally adjusted). The purchasing managers reported large increases in new orders and in employment, supported by healthy gains in production, inventory levels and delivery time.

Among the other components, the national money supply (M2) rose rapidly for the fourth consecutive month; the number of initial unemployment insurance claims fell (a positive leading indicator); and the number of hours worked in the manufacturing industry increased.

The only component of the index that declined by more than a slight amount was residential building permits, but this followed a huge increase in July. The two-month net gain indicates that home building will remain at a fast pace during the fall.

OUTLOOK

The widespread gains in the Arizona index (see Figure I) paint a convincing picture of stronger economic growth through the remainder of 1985, following a year of erratic, frequently subpar activity. A recession is highly unlikely before next summer. However, the pattern of the index has been erratic since early 1984, and little progress has yet been made toward resolving the nation's underlying economic problems: the trade and budget deficits. Thus, it is too early to predict more than a temporary improvement in economic conditions; by 1986, the Arizona economy could again slow. The September survey of Arizona purchasing managers confirms that the improvement may be temporary. The seasonally adjusted results indicate stagnation similar to that through most of 1985.

The national Index of Leading Economic Indicators rose rapidly in August for the second straight month; the last decline in the index occurred in April. Thus, improved economic conditions are also likely nationally during the remainder of 1985.

— **Tom R. Rex**
Research Manager

TABLE 1
NET CONTRIBUTION OF INDIVIDUAL COMPONENTS TO THE ARIZONA INDEX OF LEADING ECONOMIC INDICATORS

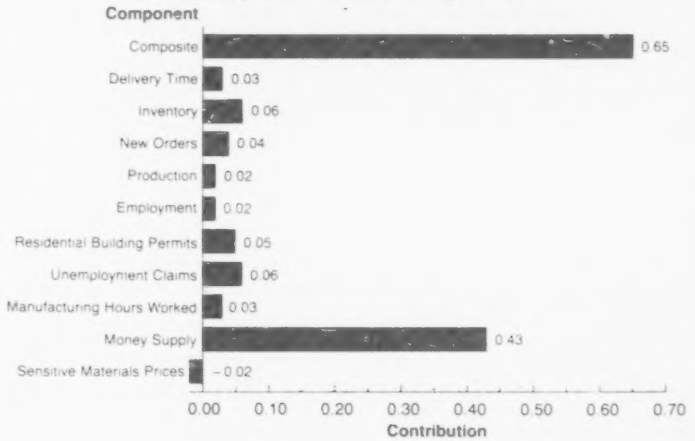
	Net Contribution*			
	May	*June*	*July*	*Aug.*
Delivery Time*	−.05	.05	−.06	.09
Inventory Levels*	−.15	.10	.03	.06
New Orders*	−.01	.04	−.04	.13
Production*	−.05	−.01	.01	.07
Employment*	−.02	.02	−.07	.11
Residential Building Permits	−.02	−.08	.60	−.37
Unemployment Insurance Claims	.01	.15	−.14	.16
Average Workweek, Manufacturing	−.19	−.04	.06	.07
Money Supply	.29	.54	.31	.44
Change in Sensitive Materials Prices	.10	.02	−.05	−.04
OVERALL INDEX	−.09	.79	.65	.72

*The net contribution of each component is calculated by multiplying the monthly change in its index by its relative importance.

*Based on indicators from the purchasing management associations of Arizona and southern Arizona.

Source: Bureau of Business and Economic Research, College of Business, Arizona State University.

FIGURE I
ARIZONA INDEX OF LEADING ECONOMIC INDICATORS
Contribution, by Component
Average, June 1985—August 1985



Source: Bureau of Business and Economic Research, College of Business, Arizona State University.

ARIZONA ECONOMIC INDICATORS

	Month or Quarter	Value	Percent Change from Previous Period	Percent Change from Year Ago	Year-to-Date Value	Year-to-Date Percent Change from Year Ago
GROSS STATE PRODUCT (In Billions of Dollars, at Annual Rate)						
Arizona - Current Dollars	1st Qtr.	43.948	11.1	10.5	NA	NA
Arizona - 1972 Dollars	1st Qtr.	21.010	4.5	7.5	NA	NA
CONSUMER PRICE INDEX (1977 = 100)						
Metropolitan Phoenix	3rd Qtr.	191.4	0.3	4.5	NA	NA
INDEX OF LEADING ECONOMIC INDICATORS (1977 = 100)						
Arizona	August	106.5	0.7	3.1	NA	NA
BUILDING PERMITS (Total Dollar Value in Thousands)						
Maricopa County	July	411,208	12	34	2,529,750	7
Pima County	July	74,869	26	42	480,674	0
Balance of State	July	64,337	1	28	405,501	2
Arizona	July	550,414	12	34	3,415,925	5
TOTAL HOUSING UNITS AUTHORIZED						
Maricopa County	July	3,990	-17	-10	33,024	-17
Pima County	July	767	-20	-10	7,724	-22
Balance of State	July	1,234	-33	28	10,359	28
Arizona	July	5,991	-21	-4	51,107	-12
HOME SALES						
Maricopa County - Number	August	4,753	-19	18	36,306	-5
Maricopa County - Median Price	August	76,000	1.3	4.5	73,150	3.4
ELECTRICAL POWER SALES (In Millions of Kilowatt Hours)						
Arizona	August	3,905.9	-0.4	8.0	24,711.2	7.7

NA = Not Applicable.

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